

Engineering Division
OA/W514

COMMUNICATIONS EQUIPMENT MODIFICATION NO. 14

(For Electronics Technicians)

SUBJECT : Installation of Antenna Transfer Assembly Switch.

EQUIPMENT AFFECTED : B222 Transmitter, Dual 1.23KW, NWR

PARTS PROVIDED : 1 Kit, NWR Field Retrofit Switch Assembly -
SRS P/N 410475 comprised of:

- 1 Front Cover - SRS P/N 410466-02
- 1 Switch. toggle-; DPDT. (momentary ON-OFF-momentary ON)
SRS P/N 500315
- 2 Plug. 8-Pin, F-SRS P/N P00210
- 1 Adapter, 8-Pin, M-SRS P/N 410484
- 3 Terminal, Crimp, No. 8. 18-22GA
SRS P/N H00343

MODIFICATION

PROCUREMENT : All parts required to complete this modification will be forwarded to all NWR B222 transmitter sites via AES's.

TIME REQUIRED : 1/2 Work Hour

General: -- This modification describes a method of incorporating an antenna transfer switch assembly into the NWR B222 dual transmitters, allowing manual selection of the desired transmitter.

PROCEDURE: (Refer to Figures 1 and 2).

CAUTION : Remove all power from the transmitter system

1. Remove the antenna transfer box front cover using Phillips screwdriver.
2. Unplug P2 from switching PC Board A1.
3. Plug J1 of the switch assembly into P2, and P1 of the switch assembly into PC Board A1. (See Figure 1.)
4. Check switch operation as described below:

Restore all power to the transmitters.

- a. Move the switch in the direction of transfer i.e. if transferring from transmitter 1 to transmitter 2, move switch, to left, and vice versa for transmitter 1.

b. Turn power OFF and then ON to both remote units, simultaneously.

C. Transfer is complete.

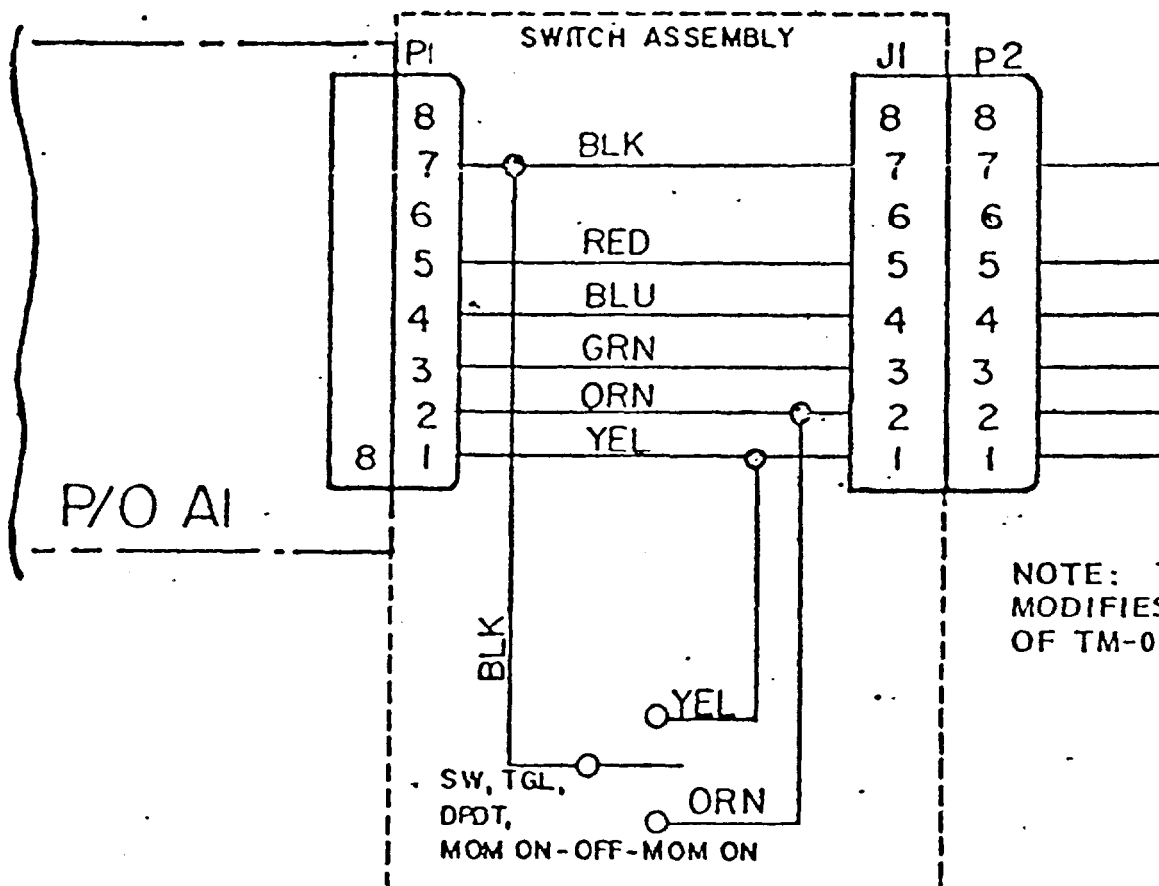
5. Install new transfer box front panel. (See Figure 2.)

NOTE: Make necessary pen-and-ink changes to Figure 15-1 of Page 15-3 of Manual TM 0416D. per Figure 1 of this modification.

Attachments:

Figure 1

Figure 2



NOTE: THIS DRAWING
MODIFIES FIGURE 15-1
OF TM-0416D

Figure 1

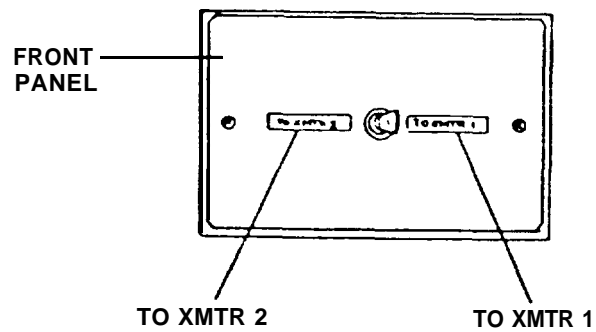
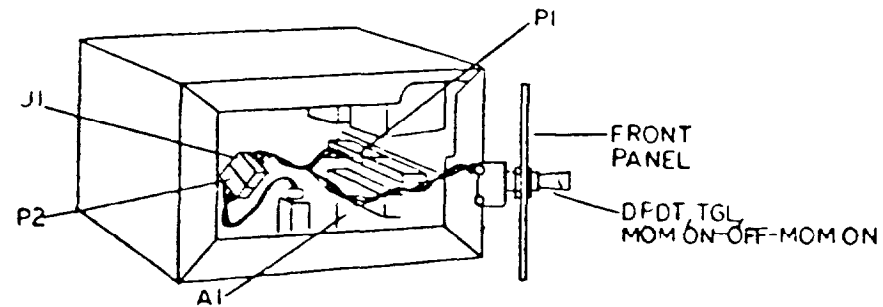


Figure 2

PARTS LIST

410466-02	Front Panel	(1 ea)
S00315	Switch, Toggle, DPDT	(1 ea)
P00210	Plug, 8 pin, F	(2 ea)
410484	Adopter, 8 pin. M	(1 ea)
H00343	Term, Crimp, #8, 18-22 Ga	(3 ea)



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
Silver Spring, Md. 20910

August 21, 1984 W/OTS141: HGH

TO: All NWS Regional Headquarters, Area Electronics Supervisors,
and Electronics Technicians (EHB-7 Distribution)

FROM: W/OTS1 - J. Michael St. Clair *J. M. St. Clair*

SUBJECT: Transmittal Memorandum for Engineering Handbook No. 7, Issuance 84-5

1. Material Transmitted:

Engineering handbook No. 7 - Communications Equipment, Section 3.4,
Modification Note 18: NWR Transmitter B220 Low Power Alert Tones.

2. Summary:

Modification Note 18 incorporates changes in the NWR B220 transmitter to
allow the transmitter to transmit Low Power Alert Tones if the PA power
supply becomes disabled.

3. Effect on Other Instructions:

None.

4. Certification Statement:

This modification has been successfully field tested.

5. Reporting Modification to WSH Engineering Division:

Target date for completion of this modification is Sept. 10, 1984.

All completed equipment modifications shall be reported on WS Form H-28,
Engineering Progress Report, as outlined in EHB-4, Part 2.

EHB-7
Issuance 84- 5



Engineering Division
W/OTS14

COMMUNICATIONS EQUIPMENT MODIFICATION NOTE 18
(for Electronics Technicians)

SUBJECT : NWR Transmitter B220 Low Power Alert Tones

PURPOSE : To incorporate changes in the NWR B220 transmitter to transmit Low Power Alert Tones if the PA power supply becomes disabled.

EQUIPMENT AFFECTED : All NWR B220 Transmitters

PARTS REQUIRED : PVC Hookup Wire, 20-22 AWG, approximately 4 ft. total length. Obtain locally.
Connector pin, one each, SRS P/N PM0007, used in SRS connector No. P00253
Connector Pin, one each, SRS P/N PM0008, used in SRS connector No. J00253

MOD PROCUREMENT : Spare connector pins will be sent to AES should you require them.

SPECIAL TOOLS REQUIRED : None.

TEST EQUIPMENT REQUIRED : NWR Receiver

TIME REQUIRED : 2 Work hours.

General:

At present, B220 NWR transmitters are configured so that the Power Amplifier (Unit 1) Control Board must have power applied to generate Low Power Alert Tones. If the Power Supply (Unit 2) fails, the system cannot generate alert tones. This modification will cause the system to ground the Remote Bypass Tone Enable signal line and generate alert tones even if the Power Supply fails. Utilizing unused contacts in the Power Supply relay K4, the Remote Bypass Tone Enable line will be pulled to ground whenever the Power Supply fails and relay K4 is de-energized.